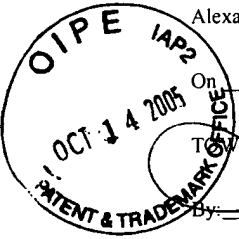


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PATENT
Attorney Docket No.: 018563-006010US
Client Reference No.: AT-00109.1

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450



On October 12, 2005
By TOWNSEND and TOWNSEND and CREW LLP

Krista Merrimac

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Jones et al.

Application No.: 10/802,124

Filed: March 15, 2004

For: SUBDIVIDING A DIGITAL
DENTITION MODEL

Customer No.: 46718

Examiner: Wilson, J. J.

Art Unit: 3732

SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37
CFR §1.97 and §1.98

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references [in compliance with the requirements of 1287 OG 163] are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

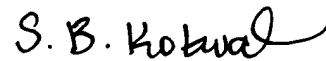
As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no

representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement.

However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Sujit B. Kotwal
Reg. No. 43,336

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SBK:tfw
60563442 v1

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet **1** of **5****Complete if Known**

Application Number	10/802,124
Filing Date	March 15, 2004
First Named Inventor	JONES, TIMOTHY N.
Art Unit	3732
Examiner Name	Wilson, J. J.
Attorney Docket Number	018563-006010US

U.S. PATENT DOCUMENTS+

Examiner Initials*	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	3,407,500	10-29-1968	Kesling	
	2	3,683,502	08-15-1972	Wallshein.	
	3	3,922,786	12-02-1975	Lavin	
	4	3,983,628	10-05-1976	Acevedo	
	5	4,324,546	04-13-1982	Heitlinger et al.	
	6	4,324,547	04-13-1982	Arcan et al.	
	7	4,500,294	02-19-1985	Lewis	
	8	4,526,540	07-02-1985	Dellinger	
	9	4,575,330	03-11-1986	Hull	
	10	4,591,341	05-27-1986	Andrews	
	11	4,609,349	09-02-1986	Cain	
	12	4,664,626	05-12-1987	Kesling	
	13	4,676,747	06-30-1987	Kesling	
	14	4,836,778	06-06-1989	Baumrind et al.	
	15	4,850,865	07-25-1989	Napolitano	
	16	4,877,398	10-31-1989	Kesling	
	17	4,880,380	11-14-1989	Martz	
	18	4,889,238	12-26-1989	Batchelor	
	19	4,890,608	01-02-1990	Steer	
	20	4,935,635	06-19-1990	O'Harra,	
	21	4,941,826	07-17-1990	Loran et al.	
	22	4,983,334	01-08-1991	Adell	
	23	5,125,832	06-30-1992	Kesling	
	24	5,145,364	09-08-1992	Martz et al.	
	25	5,176,517	01-05-1993	Truax	
	26	5,440,326	08-08-1995	Quinn	
	27	5,528,735	06-18-1996	Strasnick et al.	
	28	5,645,420	07-08-1997	Bergersen	
	29	5,692,894	12-02-1997	Schwartz et al.	
	30	5,725,378	03-10-1998	Wang	
	31	5,823,778	10-20-1998	Schmitt et.al.	
	32	5,848,115	12-08-1998	Little et al.	
	33	5,857,853	01-12-1999	van Nifterick et al.	
	34	5,866,058	02-02-1999	Batchelder et al.	
	35	5,879,158	03-09-1999	Dolye et al.	
	36	5,880,961	03-09-1999	Crump	
	37	5,880,962	03-09-1999	Andersson et al.	
	38	5,934,288	08-10-1999	Avila et al.	
	39	5,957,686	09-28-1999	Anthony	
	40	5,964,587	10-12-1999	Sato	
	41	5,971,754	10-26-1999	Sondhi et al.	

Examiner Signature	Date Considered
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* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Complete if Known		
			Application Number	10/802,124	
			Filing Date	March 15, 2004	
			First Named Inventor	JONES, TIMOTHY N.	
			Art Unit	3732	
Examiner Name	Wilson, J. J.				
Attorney Docket Number	018563-006010US				
Sheet	2	of	5		

U.S. PATENT DOCUMENTS*					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
	42	6,015,289	01-18-2000	Andreiko et al.	
	43	6,044,309	03-28-2000	Honda	
	44	6,049,743	04-11-2000	Baba	
	45	6,062,861	05-16-2000	Andersson	
	46	6,068,482	05-30-2000	Snow	
	47	6,099,314	08-08-2000	Kopelman et al.	
	48	6,123,544	09-26-2000	Cleary	
	49	6,152,731	11-28-2000	Jordan et.al.	
	50	6,183,248	02-06-2001	Chishti et al.	
	51	6,190,165	02-20-2001	Andreiko et al.	
	52	6,217,334	04-17-2001	Hultgren	
	53	6,244,861	06-12-2001	Andreiko et al.	
	54	6,309,215	10-30-2001	Phan et al.	
	55	6,315,553	11-13-2001	Sachdeva et al.	
	56	6,322,359	11-27-2001	Jordan et al.	
	57	6,350,120	02-26-2002	Sachdeva et.al.	
	58	6,398,548	06-04-2002	Muhammad et al.	
	59	6,524,101	02-25-2003	Phan et al.	
	60	6,554,611	04-29-2003	Chishti et al.	
	61	2002/0006597	01-17-2002	Andreiko et al.	
	62	RE 35169	03-05-1996	Lemchen et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
	63	AU	517102		07-09-1981	Hito Suyehiro		<input type="checkbox"/>
	64	AU	3031677		05-10-1979	Hito Suyehiro		<input type="checkbox"/>
	65	AU	5598894		06-08-1994	Ormco Corp		<input type="checkbox"/>
	66	CA	1121955		04-20-1982	Suyehiro Hito		<input type="checkbox"/>
	67	DE	2749802		05-11-1978	Suyehiro Hito		<input checked="" type="checkbox"/>
	68	DE	69327661		07-20-2000	Ormco Corp		<input checked="" type="checkbox"/>
	69	EP	0667753		08-23-1995	Ormco Corp		<input type="checkbox"/>
	70	ES	463897		01-01-1980	Hito Suyehiro		<input checked="" type="checkbox"/>
	71	GB	1550777		08-22-1979	Hito Suyehiro		<input type="checkbox"/>
	72	JP	53-058191		05-25-1978	Yoshii		<input checked="" type="checkbox"/>
	73	JP	04-028359		01-30-1992	Mitsubishi Petrochemical Co		<input checked="" type="checkbox"/>
	74	JP	08-508174		09-03-1996	Ormco Corp		<input checked="" type="checkbox"/>

Examiner Signature		Date Considered	
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60563442 v1

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			Application Number	10/802,124	
			Filing Date	March 15, 2004	
			First Named Inventor	JONES, TIMOTHY N.	
			Art Unit	3732	
			Examiner Name	Wilson, J. J.	
Sheet	3	of	5	Attorney Docket Number	018563-006010US

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
	75	WO	98/32394		07-30-1998	Hultgren Bruce Willard		<input type="checkbox"/>

Examiner Signature		Date Considered	
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60563442 v1

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/802,124
				Filing Date	March 15, 2004
				First Named Inventor	JONES, TIMOTHY N.
				Art Unit	3732
				Examiner Name	Wilson, J. J.
Sheet	4	of	5	Attorney Docket Number	018563-006010US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
	76	ANDREWS, <i>The Six Keys to Optimal Occlusion Straight Wire</i> , Chapter 3, pp 13-24.		
	77	BERNARD et al., "Computerized Diagnosis in Orthodontics for Epidemiological Studies: A Progress Report, Paper presented at International Association for Dental Research 66th General Session, March 9-13, 1988, Montreal, Canada. The abstract is published in <i>J Dental Res Special Issue</i> Vol. 67, p. 169.		
	78	CARDINAL INDUSTRIAL FINISHES, Powder Coatings information posted at http://www.cardinalpaint.com on Aug. 25, 2000, 2 pages total.		
	79	DENT-X posted at http://www.dent-x.com/DentSim.htm 09/24/98, 6 pages total.		
	80	DOYLE, Digital Dentistry, <i>Computer Graphics World</i> , Oct. 2000 pp. 50-52, 54.		
	81	FÜTTERLING et al., "Automated Finite Element Modeling of a Human Mandible with Dental Implants," WSCG '98 -Conference Program, retrieved from the Internet: << http://wscg.zcu.cz/wscg98/papers98/Strasser_98.pdf >>, 8 pages total.		
	82	GOTTLEIB et al., "JCO Interviews Dr. James A. McNamara, Jr., on the Frankel Appliance: Part 2: Clinical Management," <i>Journal of Clinical Orthodontics</i> , Vol. 16, No. 6, (June 1982) pp. 390-407		
	83	HOJJATIE et al., "Three-Dimensional Finite Element Analysis of Glass-Ceramic Dental Crowns," <i>J Biomech.</i> (1990) Vol. 23, No. 11, pp.1157-1166.		
	84	KUNII et al., Articulation Simulation for an Intelligent Dental Care System, <i>Displays</i> (1994) 15:181-188.		
	85	TRU-TAIN ORTHODONTIC & DENTAL SUPPLIES, Product Brochure, Rochester, Minnesota 55902, [Not Dated], 16 pages total.		
	86	PROFFIT et al, <i>Contemporary Orthodontics</i> (Second Ed.) Chapter 15, Mosby Inc, (October 1992), pp 470-533		
	87	RAINTREE ESSIX & ARS MATERIALS, INC., Raintree Essix, Technical Magazine Table of contents and Essix Appliances, http:// www.essix.com/magazine/default.html Aug. 13, 1997, 7 pages.		
	88	REDMOND et al. Clinical Implications of Digital Orthodontics, <i>Am. J. Orthodont. Dentofacial Orthopedics</i> , Vol. 117 No. 2 (2001), pp. 240-242.		
	89	REKOW et al., "CAD/CAM for Dental Restorations - Some of the Curious Challenges," <i>IEEE Transactions on Biomedical Engineering</i> , (April 1991) Vol. 38, No. 4, pp. 344-345.		

Examiner Signature		Date Considered	
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				Filing Date	March 15, 2004
				First Named Inventor	JONES, TIMOTHY N.
				Art Unit	3732
				Examiner Name	Wilson, J. J.
Sheet	5	of	5	Attorney Docket Number	018563-006010US

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	90	REKOW et al., "Comparison of Three Data Acquisition Techniques for 3-D Tooth Surface Mapping," <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , (1991) Vol. 13, No. 1, pp. 344-345.	
	91	SCHROEDER et al., Eds. The Visual Toolkit, Prentice Hall PTR, New Jersey (1998) Chapters 6, 8 & 9, (pages 153-210, 309-354, and 355-428, respectively).	
	92	SINCLAIR, "The Readers' Corner," <i>Journal of Clinical Orthodontics</i> , Vol 26, No. 6, (June 1992) pp. 369-372	
	93	VARADY et al., Reverse Engineering Of Geometric Models—An Introduction, <i>Computer-Aided Design</i> , 29 (4):255-268, 1997.	

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